



Usage Notice

Safety Information

Do

Read, keep, and follow instructions.

- Heed all warnings.
- Turn off and unplug the power plug from the AC outlet before cleaning the unit.
- Use a soft dry cloth with mild detergent to clean the housing.
- Only use attachments/accessories certified by the manufacturer.
- Refer all servicing to certified service partner. Repair service is required once the device has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Do Not

- Use this apparatus near water.
- Use abrasive cleaners, waxes or solvents to clean the unit.
- Install near any heat sources such as radiators, heaters, stoves, or other apparatus (including amplifier) that produce heat.
- To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.
- Open or disassemble the unit as this may cause electric shock.
- Near any appliance generating a strong magnetic field.
- Use in direct sunlight.
- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Dangerous high voltages are present inside the enclosure. Do not open the cabinet. Refer servicing to qualified personnel only.



Introduction

Features

- Native resolution output without compensation.
- Image Blending with smooth gray scale at overlap area (Crop feature only can be enable at default scenario: 1x4XGA, 1x3WXGA and 1x21080P. Cropping box/card is required for other blending scenarios.
- Warping/ 4 Corners / barrel /pincushion (adjust via geometry grid: Max up to 17points x 17 points)
- Dynamic full range Black Level adjustment
- Standard 1U box for professional market with 2 blending sets
- User-friendly user interface for easy adjustment

Environment conditions:

- ☐ ☐ Temperature:
 - Operating: 0°C ~ 40°C (41°F ~ 104°F)
 - Storage: -20°C ~ 60°C (-4°F ~ 140°F)
- ☐ ☐ Humidity:
 - Operating: 5°C ~ 40°C, 80%RH (Max.), Non-condensing
 - Storage: -20°C ~ 60°C, 80%RH (Max.), Non-condensing

Package Overview

The following parts are included in the carton. (*)

- GB-200 Blending Box
- AC Power Cord
- User's guide (CD)
- Warranty card



Due to different applications in each country, some regions may have different accessories.



Introduction

Product Overview

Front



Back



- 1. Front Side: LED indicators and Power Switch
- 2. Rear Side: Input / Output and control panel

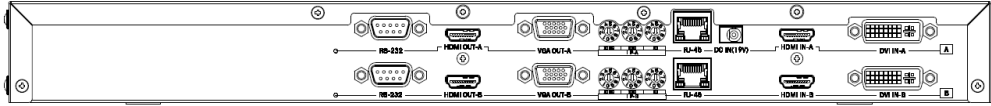
LED Light Message

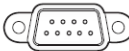
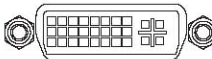
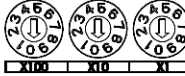
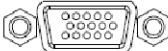
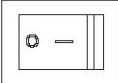
Status	LED	LED	Flashing Interval (Second)
	Blue	Yellow	
Power On (Normal)	Steady light	OFF	N/A
Standby	Flashing	OFF	1
HDMI Rx. Failed	OFF	Flashing	1
HDMI Tx. Failed	OFF	Flashing	2
Warp Failed	OFF	Flashing	4
HDMI Rx. and Tx. Failed	Flashing Alternately		1
HDMI Rx. and Warp Failed	Flashing Alternately		2
HDMI Tx. and Warp Failed	Flashing Alternately		4



Introduction

I/O and Control Panel



No.	I/O	Name	No.	I/O	Name
1		RS232	6		RJ45
2		HDMI IN	7		RS232 (Service)
3		DVI IN	8		IP Definition Switch
4		HDMI OUT	9		DC IN
5		VGA OUT	10		ON/OFF (Front Panel)

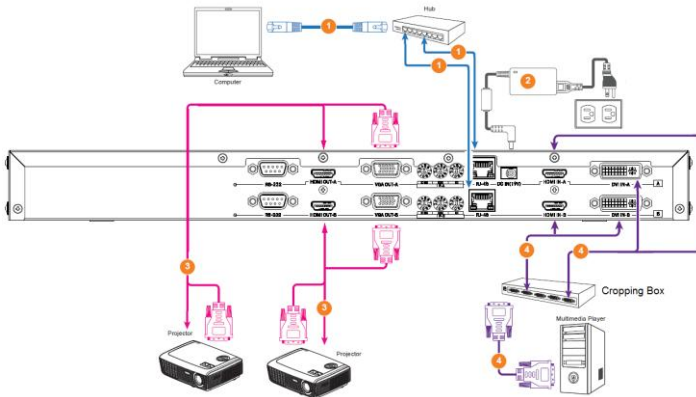


IP Definition Switch XXX (192.168.0.xxx); xxx can be 10 ~ 250
 Default IP for Channel A is 192.168.0.11
 Default IP for Channel B is 192.168.0.12

Installation

Connecting to the Devices

- For application GB-200 with cropping box at Multi-Function

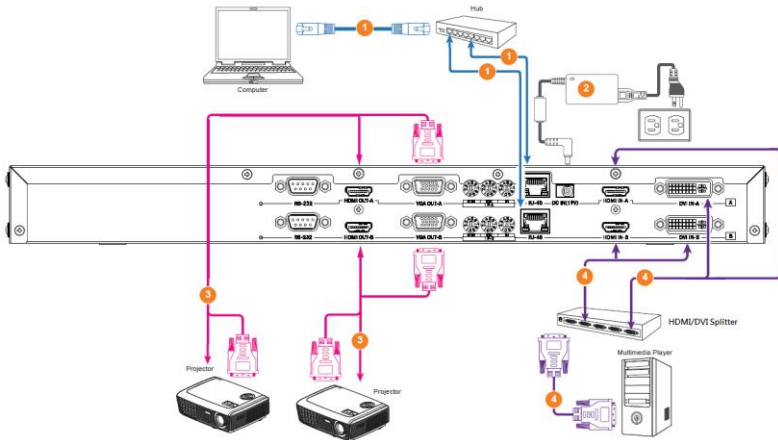


To connect the blending box with other devices, there should be cables listed as below

No.	Legend	Cable	Connection
1		Network cable	- GB-200 box to hub - Computer to hub
2		Power cord	To power socket
3		HDMI/VGA cable (OUT)	GB-200 box to projector
4		HDMI/DVI cable (IN)	- Multimedia Player to Cropping Box - Cropping Box to GB-200
5	N/A	RS232 cable	For service only

Installation

- For application GB-200 is as stacking warp solution (stacking two projector to present one image) at Multi-Function project or is application at Blending project



To connect the blending box with other devices, there should be cables listed as below

No.	Legend	Cable	Connection
1		Network cable	- GB-200 box to hub - Computer to hub
2		Power cord	To power socket
3		HDMI/VGA cable (OUT)	GB-200 box to projector
4		HDMI/DVI cable (IN)	- Multimedia Player to Cropping Box - Cropping Box to GB-200
5	N/A	RS232 cable	For service only



The HDMI/DVI Splitter should support EDID reading feature that support to read GB-200's EDID from PC side

Installation

Setting the IP Address

Setting the Computer's IP Address

Step 1: Open the "Internet Protocol (TCP/IP) Properties"

- Go to the start up menu and click Control Panel".



- Click on "Network and Internet Connections".



Warping Box supports Windows XP, **Windows Vista (Home)**, Windows7 (Home);
Warping Box does NOT support Mac OS.

Installation

- Click on “Network Connections”.



- You should now see your “LAN (local area network)” icon. Right click the “LAN (local area network) icon” and click on “Properties” at the bottom of the drop down window. (*)

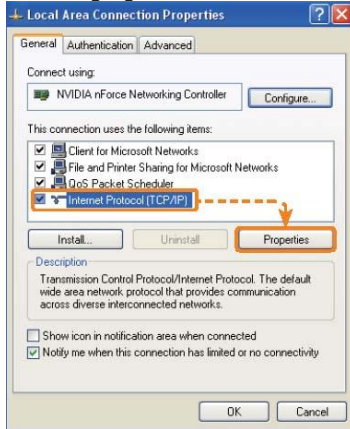


Please disconnect the wireless network before setting computer's IP address.

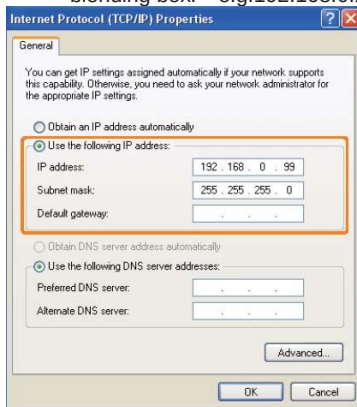
Installation

Step 2: Set the computer's IP Address.

- Highlight the “Internet Protocol (TCP/IP)” and click the “Properties” button.



- In the “Internet Protocol (TCP/IP) Properties” window, check the radio button for “Use the following IP address”. Set computer's IP address to the same network group with blending box. e.g. 192.168.0.XXX (XXX= 10 ~ 250) ^(NOTE #5)



- Click the “OK” button to save and apply the settings.



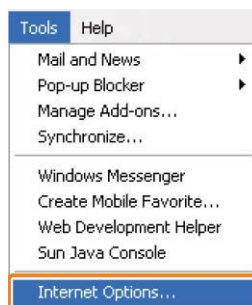
Please disconnect the wireless network before setting computer's IP address.

Installation

Setting the Computer's Proxy Server

Step 1: Click on "Internet Options"

- You can find it in the following path: "Start up menu -> Control Panel -> Network and Internet Connections -> Internet Options".
- Or open the web browser and select the "Tools" menu and then choose the "Internet Options".



Or

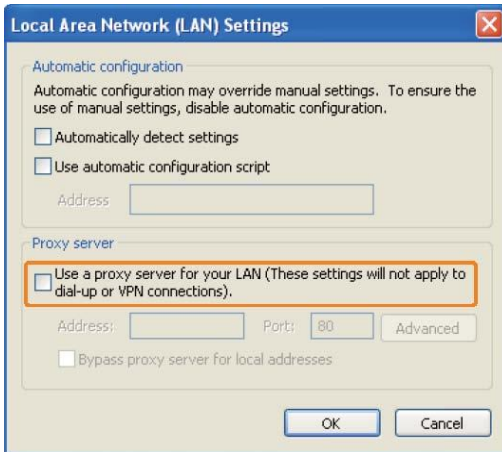
Step 2: Select the "Connections" tab and then press the "LAN Settings" button.





Installation

Step 3: Do NOT check the “Use a proxy server for your LAN” option. Click the “OK” button to save and apply the settings.



Local Area Network (LAN) Settings

Automatic configuration

Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.

☐ Automatically detect settings

☐ Use automatic configuration script

Address:

Proxy server

☐ Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).

Address: Port:

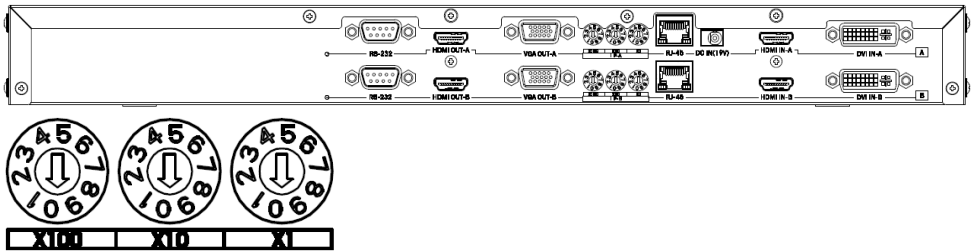
☐ Bypass proxy server for local addresses

Installation

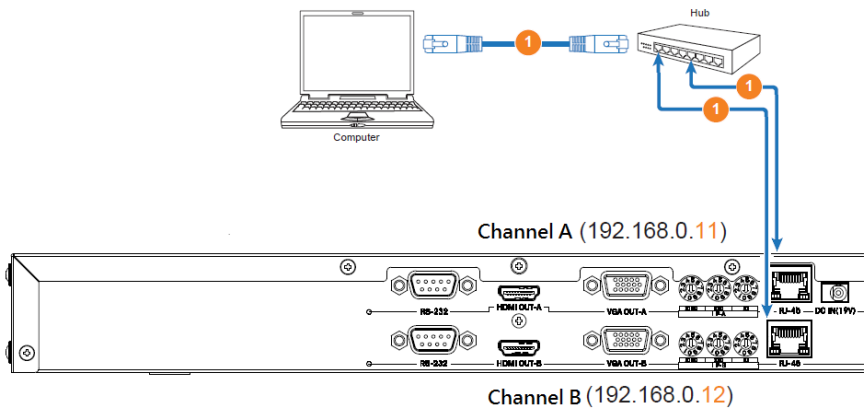
Setting the Blending Box's IP Address

The default IP address of blending box is A (192.168.0.11) and B (192.168.0.12). If user needs to modify IP address, please follow instruction. (NOTE #6)

Step 1: Use flat screw to adjust the default IP address A (192.168.0.11) and B (192.168.0.12) in rear panel into other IP address when need other's IP Address for control.



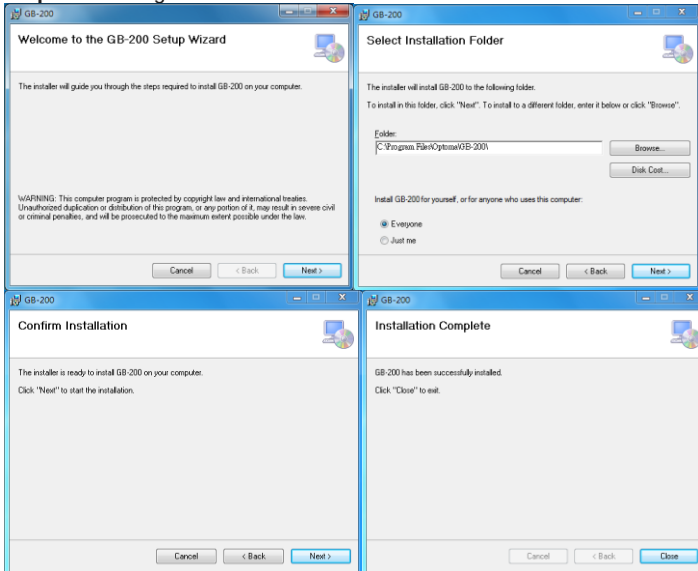
Step 2: the architecture looks like the image shown as below.



Do NOT connect all boxes to the same IP address; it will cause IP address confilction.

Installation

Step 3: Installing the GB-200 AP



Step 4: After installation is finishing, clicking the icon “GB-200.exe” on desktop





User Controls

Multi-Function Project

Create New Multi-Function Project

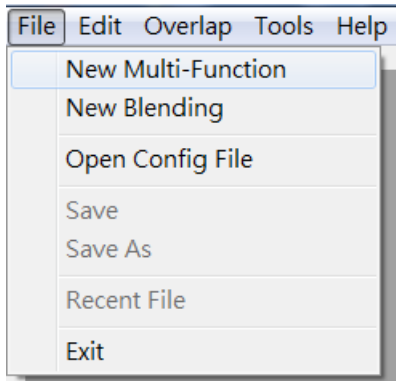
The box can be operated following two scenarios: “Multi-Function” and” Blending.”

“Multi-function” includes following feature”

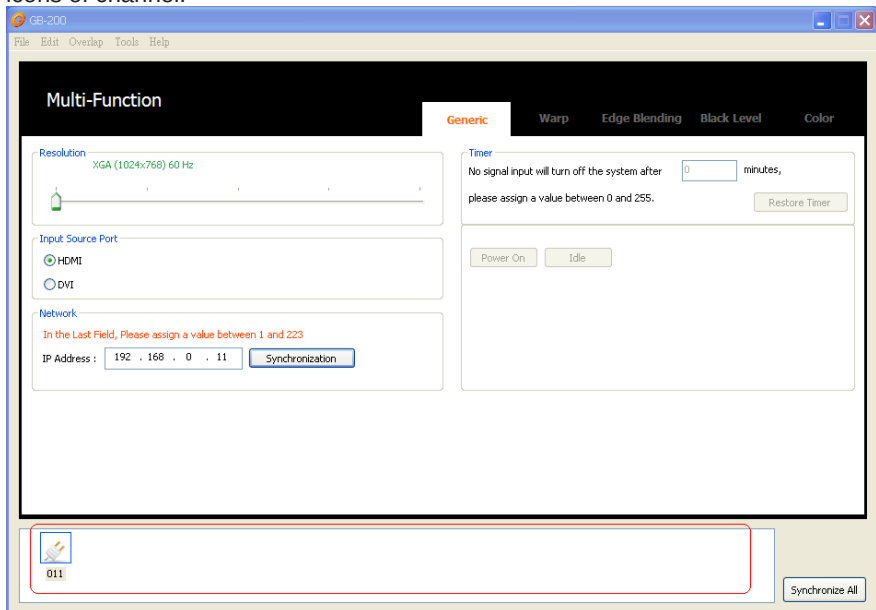
- (i) Warp: Adjust image to do geometry correction for curve, cylinders screen...etc
- (ii) Color :Adjust color uniformity by point or area
- (iii) Edge Blending: Adjust the smooth of gray scale at each edge
- (iv) Black Level : Adjust the luminance of black at non-overlap area can be as same as at overlap area

User Controls

After installation AP, clicking GB-200 icon follows the steps to install



Step 1: Create “New Multi-Function” Project. User can create channels for blending Press Multi-Function again; the second channel icon will show. If you need control more than two channel icons, please repeat the process again to create more icons of channel.



The Icons of Channel Status (at position Red frame):



- Not Connected Icon :

- Connected Icon:



- Sleep Icon:



- The channel is selected icon :



- The channel is connected and selected icon :



- How to delete the Channel: Press **【delete】** buttons after the channel was selected

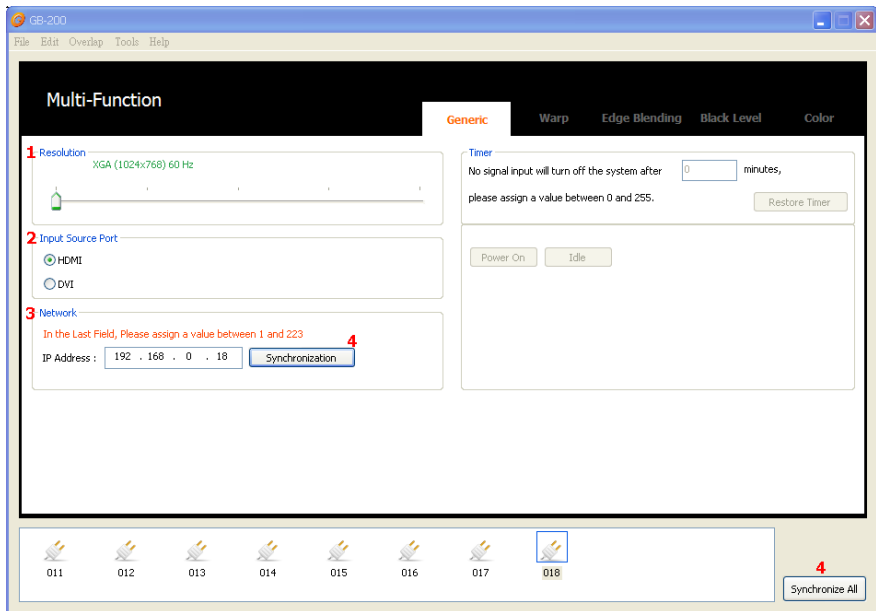
User Controls

Step 2: 【Generic】 Settings

1. Select 【Resolution】 :XGA/WXGA/1080P/WUXGA
2. Select 【Input source port 】 :HDMI or DVI
3. Editing 【IP address 】 at this channel that should be as same as one of IP address at rear panel of GB-200 BOX and click 【Connect】 to link
4. After the channel network is linked well with green hook on the icon of channel



,Clicking 【Synchronize】 to load default setting at AP into Box



5. Repeat Step 1 and Step 2 to create other channel's settings for control

User Controls

Step 3: 【Warp】 Settings

Press "Warp" on top bar to open 【Warp】 page



1. Adjustment Pattern Overview
 H Overlap : Modify the size of Horizontal overlap area
 V Overlap : Modify the size of Vertical overlap area
 Grid Color : Color of Pattern line (*1)
 Adjust Point : Present the point you are adjusting (*1)
 Marker Color : Present overlap area(*1)
 Marker Position : Marker color direction, L=left border, R=Right border, T=Upper border, B=Lower border (*1)
 Marker Cell : Marker Position(*1)

 (*1)Color can be customized by your preference.
2. Select **Warp** type
 Apply "Linear" or "Curve" correction at all edges
3. Adjust the **Grid Number** :Range are 2X2 (Min) , 3X3 ,5X5,9X9,17X17(Max)
 Use mouse to adjust Grid Number or Key broad 【Ctrl】 with 【+】 to increase quantity of Grid and Cursor or 【Ctrl】 with 【-】 to decrease quantity of Grid and Cursor.
 For examples the Grid Number is 3 X 3 and there are 9 Cursors
4. Adjust the **Move Pitch** :Range are 0.0625 , 0.1 , 0.5 , 1.0 , 5.0 , 10.0 , 50.0 , 100.0
 Use mouse or key broad 【+】or【-】to adjust what is move pitch for each adjust at each point.
5. Select Cursor
 When the point is **Blue** that means the point is selected.
 Use mouse or key broad 【W】·【A】·【S】·【D】 to select the point of Cursor you want to adjust
6. Move cursor
 Use Key broad 【↑】·【↓】·【←】·【→】to move Cursor with defined **Move Pitch** setting for each adjustment .
 For example :using 【↓】 to adjust, one step will be 10 pixels when **Move Pitch** is 10.



(*1) Coordinate : Provide detail information of X and Y axis of the select point for reference
(*2) Press left click of mouse with green hook at 【Blank】 to send pure Black image when need

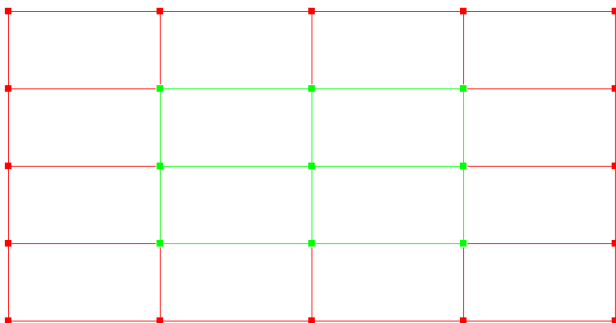


User Controls

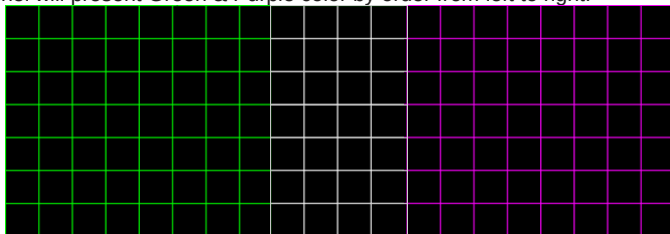
Guide line for warp adjustment

Adjust outer Cursors then inner of cursors

For example: adjust outer 16 red points first then adjust 9 green points at following photo



Each channel will present Green & Purple color by order from left to right.



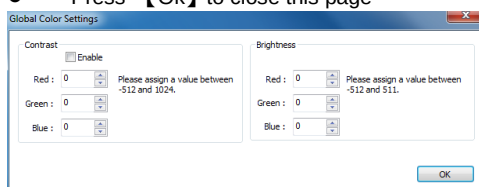


User Controls

1. The color settings of **Cursor** for Color adjustment
Press left click of mouse with green hook for **【Show Cursor】** and right click of mouse on the **【Color】** to change the cursor color via Red/Green/Blue adjustment
2. Adjust Grid number: Range are 2x2, 3x3, 5x4, 9x7
Use mouse to adjust or Key broad **【Ctrl】** with **【+】** to increase number of Cursor or **【Ctrl】** with **【-】** to decrease number of Cursor.
3. Select Cursor
When the point is **Blue** that means the point is selected.
Use mouse or key broad **【W】**、**【A】**、**【S】**、**【D】** to select the point of Cursor you want to adjust
4. Adjust contrast and brightness
Typing the value of Red/Green/Blue then pressing key broad **【Enter】**

Press **【Global】** to open following page to adjust fine tune of color for whole image

- Adjust contrast and brightness
Typing the value of Red/Green/Blue then pressing key broad **【Enter】**
- Press **【Ok】** to close this page



If the monitor or LCD projector don't have any color fine tune interface, please use **【Global】** to adjust the color for whole image

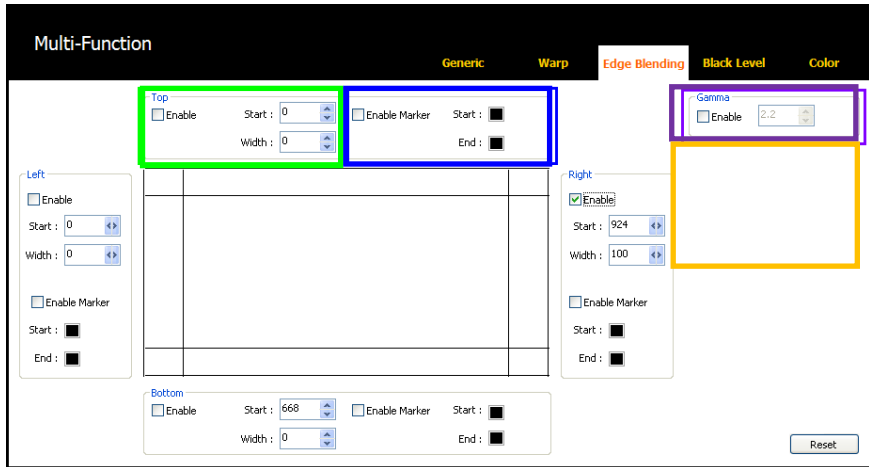
Press **【Reset】** to reset all settings at **【Color】** page



User Controls

Step 5: 【Edge Blending】 Settings

Press "Edge Blending" on top bar to open 【Edge Blending】 page



1. Select which edge of image to modify : Top/Bottom/Right/Left
 - At position **Green frame**
Press left click with green hook for 【Enable】 then Input the start point and width of Blending area and press key board 【Enter】
 - At position like **Blue frame**
Press left click with green hook for 【Enable Marker】 and Use right click on the black squares of 【Start】and【End】 to change the Mark line color via Red/Green/Blue adjustment to display Mark Line on image
2. Modify the Gamma curve for blending area
 - At position **Purple frame**
Press left click with green hook for 【Enable】 and select Gamma number you need
3. The Test Pattern's settings at position **Orange frame**
 - Input the value of overlapping horizontal pixels into 【Horizontal Space】 to define width of Blending area
 - Input the of overlapping vertical pixels into 【Vertical Space】 to define height of Blending area
 - Select the color of Test Pattern on this channel
 - Press 【Enable】 to turn Test Pattern is "on" in image

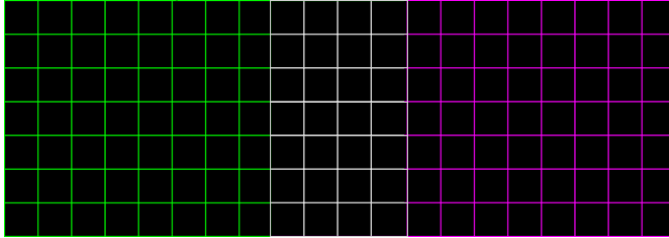


Press 【Enable】 again to turn Test Pattern is "off" in image



User Controls

4. After all channels are enable of Test Pattern and are with interval color : Green or Purple
5. Call out Step 3 Warp page to match overlap with 4 blocks between each projector



If the percentage in step 3 is too small to warp correctly 4 blocks is matching or the overlapping is too huge to warp too much, please go back to step 5 again and input the re-ranged overlap percentage(source) into the setting values of Horizontal Space and Vertical Space

User Controls

Step 6: 【Black Level】 Settings

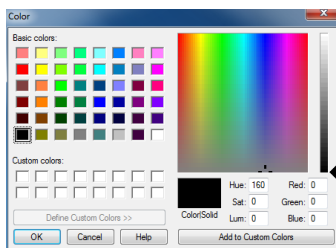
Press "Black Level" on top bar to open 【Black Level】 page and Press left click with green hook for 【Enable】



1. At position **Green frame**
Press left click with green hook for 【Enable】 and select Gamma number for whole black level adjustment

Notes: This Gamma number is designed for black level using not for overlap

2. At position **Orange frame**
There are 10 kinds of color in palette for define
 - Click one number of list to define the color you want in following page



- Select the color you want on Palette then press 【Ok】
- Or
- Define new color on right half of page you need 【Add to Custom Colors】 then press 【Ok】
 - Define other number of list if you want to use more one colors of Black Level

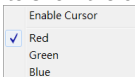


User Controls

3. At position **Blue frame**

- (i) Choosing one number(color) of Palette at **Orange frame** to define a quadrangle with this color
- (ii) Use mouse or key broad **【W】·【A】·【S】·【D】** to select the point become a hollow point (like ) for control following settings
And

Use right click on the selected point(like ) to change the cursor color via Red/Green/Blue adjustment and use **【 Enable cursor 】** to show the cursor on image or not



Use mouse or key broad **【↑】·【↓】·【←】·【→】** to move four points to define the area of quadrangle you need and press **【 overwrite 】** to finalize the first layer of area of quadrangle

- (iii) Repeat steps (ii) & (iii) if you need more quadrangles to create and these are in same number(color)of Palette at **Orange frame**
Repeating steps (i) to change another number (color) at **Orange frame** to create quadrangle with different color if need and steps (ii) to create other quadrangle



At **【Black Level】** page, Press **【Reset】** to release all quadrangles at position **Blue frame** of page



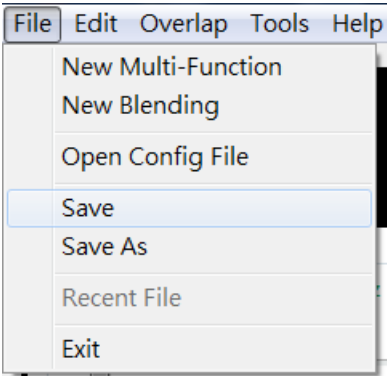
The color of all cursors only show when adjusting and won't show at final result



User Controls

Save Config file

- Click 【File】 → 【Save】



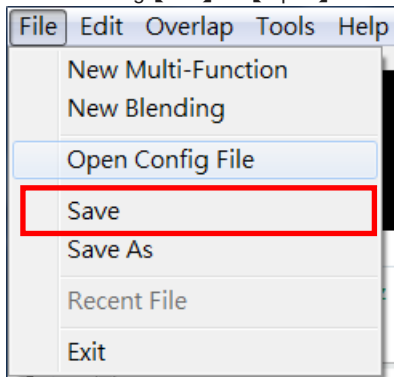
Information appears at display

Red Screen	Saving the setting of Warp
Green Screen	Saving the setting of color adjustment
Red+Green+Blue+Cyan	Saving the setting of Edge Blending
Red+Green+Blue+Cyan +Yellow+purple	Saving the setting of Black Level

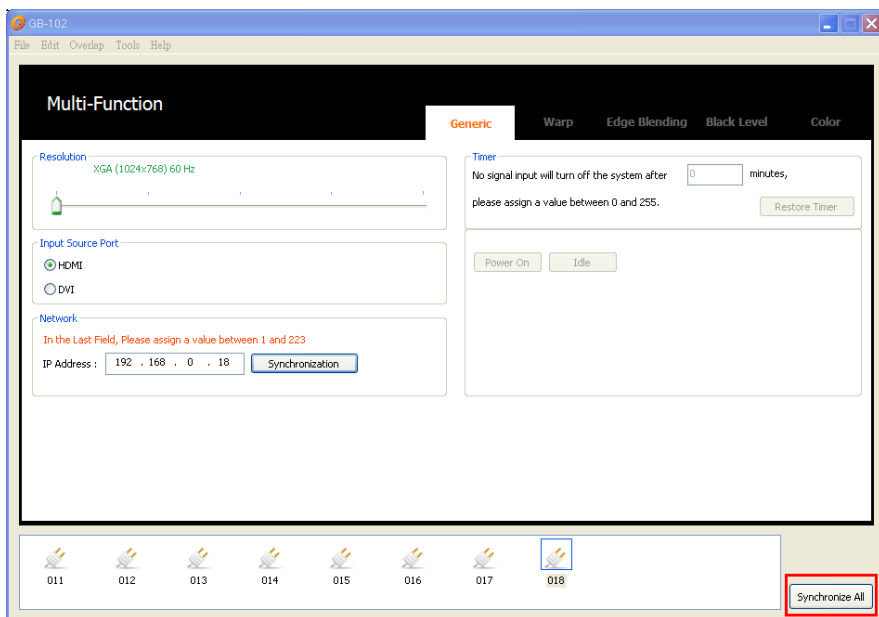
User Controls

Open the previous setting

- Clicking **【File】** → **【Open】**



Remember to click **【Synchronization All】** to synchronize all channels.





User Controls

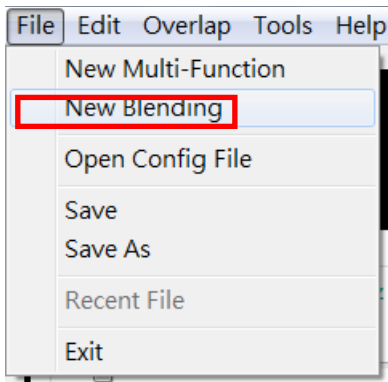
Blending Project (*)

Create New Blending Project

The box can be acted as two roles. One is Multi-Functions and the other is Blending box.

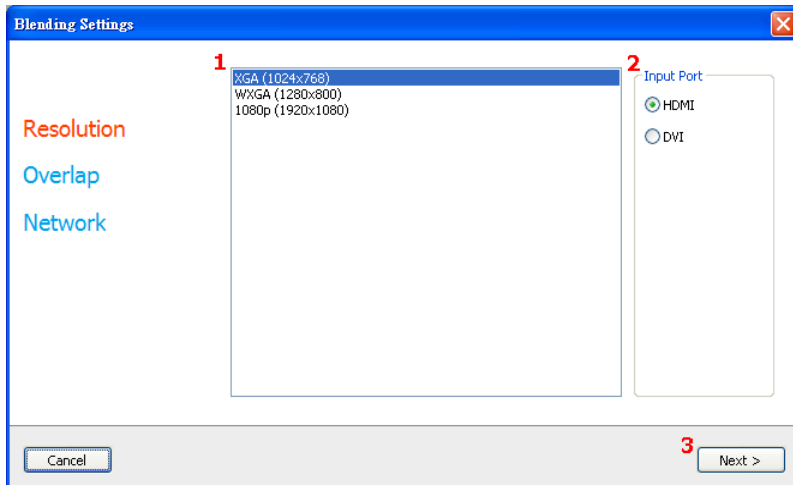
The Blending Project can allow end-user to do image blending at multi-projectors with native resolution for each projector from PC Source.

After installation AP, clicking GB-200 icon follows the steps to install



Step 1: Create "New Blending" Project will go into Blending box process.

Step 2: The following page defines the output resolution and which port will be input port



- Select Resolution: Range XGA/WXGA/1080P
Choice box output resolution (projector's native resolution)
- Select Input Port:
- Click 【Next】 button



Blending Box Project only support when source is PC and the OS must be Window 7 or Windows XP

User Controls

Step 3: Set up layout of blending settings.

Blending Settings

Resolution
Overlap
Network

1 Layout

- 1 H x 2 V
- 1 H x 3 V
- 1 H x 4 V
- 2 H x 1 V
- 3 H x 1 V
- 2 H x 2 V

Combine Projection Size : 1792x768

2 Horizontal Overlap

25% 256 Pixel

Vertical Overlap

25% 192 Pixel

Cancel < Previous **3** Next >

- Select Layout :
Define the number of blending projectors,
H means how many projectors will use in Horizontal
And
V means how many projectors will use in Vertical
- Define the value for percentage of Horizontal Overlap and Vertical overlap :
(*).
- Click **Next** button

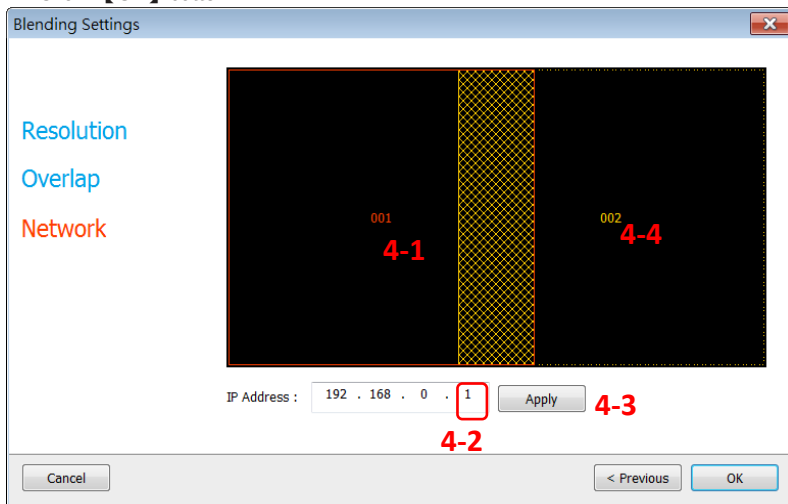


The ideal condition: the overlap's percentage at optical should be same the overlap's percentage (the setting in GB-200's AP).
In real case, please input the overlap percentage at GB-200 AP should be equal or less ($\leq$) the percentage at optical if you want to use warping settings to match the overlap perfect at step 6 later.

User Controls

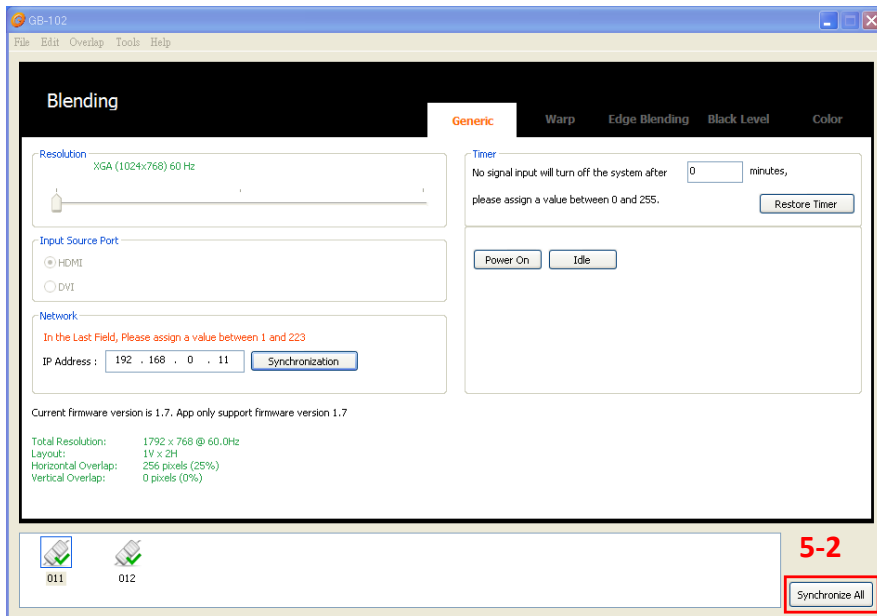
Step 4: Configure each channel's IP address in each Boxes into AP. The IP range is from 192.168.0.10 to 192.168.0.250

- (1) Select and Click the number(channel) inside the image
- (2) Change IP address to match each channel's IP address in Boxes
- (3) Click **【Apply】** button to access
- (4) Repeat above process for other number (channel) to configure different IP address at each channel
- (5) Click **【OK】** button



Step 5: AP will synchronize the status for advanced fine tune items.

- (1) Waiting each channels network is linked well with green hook(like )
- (2) Choose one channel and Clicking **【Synchronize All】** to load default setting at AP into Box



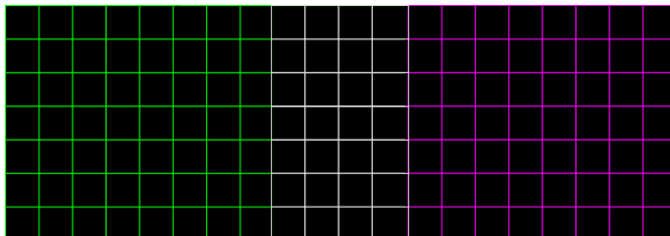
If OS is Windows XP(Not for Windows 7), the image will become orange after press **【OK】**, Please remembering to change manually the high resolution timing.

Detail settings will be Case E of “Trouble Shooting” in final page



User Controls

Step 6: Click **【Warp】** page to match overlap with 4 blocks between each projector(*)



If the percentage of Horizontal Overlap and Vertical overlap at step 3 is too small to warp 4 four block matching correct or the overlapping is to huge to warp, please go back to step 1 again to Create" New Blending" Project and input the percentage you want to process again

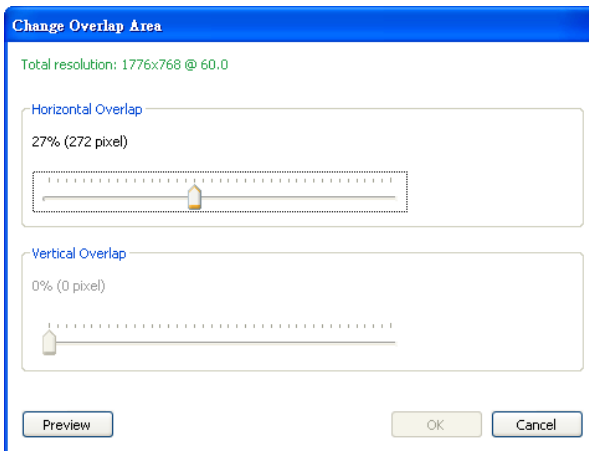
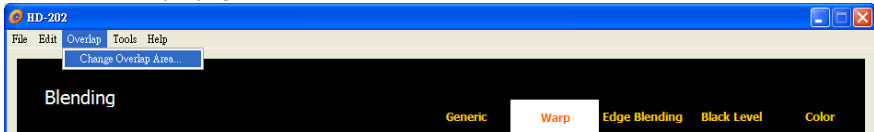
User Controls

Change the size of overlap area

- Click **【Overlap】** → **【Change Overlap Area...】**



Must Click **【Warp】** page to enable this function



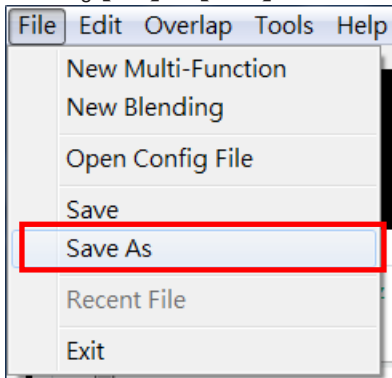
1. Adjust overlap area
2. Click **【Preview】** to preview the expected result



User Controls

Saving the setting

>Clicking 【File】 → 【Save】



Information status at screen

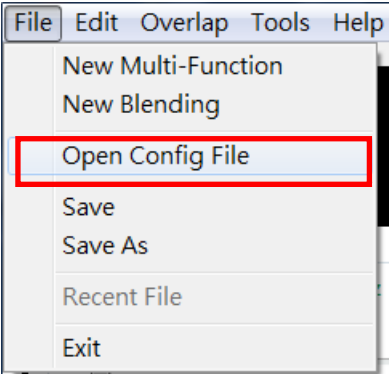
Red Screen	BOX is saving Warp settings
Green Screen	BOX is saving Color settings
Red+ Green+ Blue +Cyan screen	BOX is saving Edge Blending settings
Red+ Green+ Blue +Cyan + Yellow+ Purple screen	BOX is saving Black Level settings
Orange screen	In Blending Project: There is no input source or the timing won't support



User Controls

Open the Previous setting

>Clicking 【File】 → 【Open Config file】



After previous settings is open, please remember to press”Connect” then “Synchronize All” on each channel

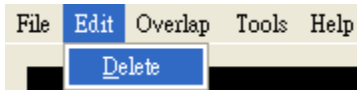
Information appears at display

Red Screen	BOX is saving Warp settings
Green Screen	BOX is saving Color settings
Red+ Green+ Blue +Cyan screen	BOX is saving Edge Blending settings
Red+ Green+ Blue +Cyan + Yellow+ Purple screen	BOX is saving Black Level settings
Orange screen	In Blending Project: There is no input source or the timing won't support 援



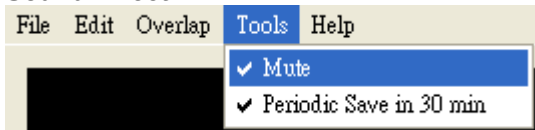
User Controls

Delete GB-200 Channel



Or Press (Del)

Sound Effect



勾選表示關閉提示音效

Config file Auto Save



Appendices

Compatibility Timing at Multi-Function Project

Modes	Resolution	V.Frequency [Hz]
XGA	1024x768	60
WXGA	1280x800	60
1080p	1920x1080	50
1080p	1920x1080	60
WUXGA	1920x1200	60



XGA and WXGA only support 60Hz output. It might have frame tear when input timing is 50Hz

Appendices

Compatibility Timing table at Blending Project (XGA)

	Layout	Overlap (%)	Overlap (pixel)	Total Resolution	HD MI	DVI
XGA@60Hz	1H 2V	H: 0	H: 0	2048×768	✓	✓
		H: 10	H: 104	1944×768	✓	✓
		H: 20	H: 208	1840×768	✓	✓
		H: 30	H: 304	1744×768	✓	✓
		H: 40	H: 408	1640×768	✓	✓
		H: 50	H: 512	1536×768	✓	✓
	1H 3V	H: 0	H: 0	3072×768	✓	✓
		H: 10	H: 100	2872×768	✓	✓
		H: 20	H: 204	2664×768	✓	✓
		H: 30	H: 304	2464×768	✓	✓
		H: 40	H: 408	2256×768	✓	✓
		H: 50	H: 512	2048×768	✓	✓
	1H 4V	H: 26	H: 266	3296×768	✓	✓
		H: 36	H: 368	2992×768	✓	✓
		H: 46	H: 469	2688×768	✓	✓
		H: 50	H: 512	2560×768	✓	✓
	2H 1V	V: 0	V: 0	1024×1536	✓	✓
		V: 10	V: 76	1024×1460	✓	✓
		V: 20	V: 152	1024×1384	✓	✓
		V: 30	V: 228	1024×1308	✓	✓
		V: 40	V: 304	1024×1232	✓	✓
		V: 50	V: 384	1024×1152	✓	✓
	3H1V	V: 21	V: 160	1024×1984	✓	✓
		V: 30	V: 228	1024×1848	✓	✓
		V: 40	V: 304	1024×1696	✓	✓
		V: 50	V: 384	1024×1536	✓	✓
	2H2V	H: 25	H: 256	1792×1360	✓	✓
		V: 23	V: 176			
		H: 40	H: 408	1640×1248	✓	✓
		V: 38	V: 288			
		H: 50	H: 512	1536×1152	✓	✓
		V: 50	V: 384			



For operating correctly on Blending Project, the recommend OS in PC will be *windows 7* and *Windows XP*.

Appendices

Compatibility Timing table at Blending Project (WXGA)

WXGA@60Hz	Layout	Overlap (%)	Overlap (pixel)	Total Resolution	HDMI	DVI
	1H 2V	H: 0	H: 0	2560×800	✓	✓
		H: 10	H: 128	2432×800	✓	✓
		H: 20	H: 256	2304×800	✓	✓
		H: 30	H: 384	2176×800	✓	✓
		H: 40	H: 512	2048×800	✓	✓
	1H 3V	H: 50	H: 640	1920×800	✓	✓
		H: 25	H: 320	3200×800	✓	✓
		H: 35	H: 448	2944×800	✓	✓
		H: 45	H: 576	2688×800	✓	✓
	2H 1V	H: 50	H: 640	2560×800	✓	✓
		V: 0	V: 0	1280×1600	✓	✓
		V: 10	V: 80	1280×1520	✓	✓
		V: 20	V: 160	1280×1440	✓	✓
		V: 30	V: 240	1280×1360	✓	✓
		V: 40	V: 320	1280×1280	✓	✓
	3H1V	V: 50	V: 400	1280×1200	✓	✓
		V: 34	V: 272	1280×1856	✓	✓
		V: 40	V: 320	1280×1760	✓	✓
		V: 45	V: 360	1280×1680	✓	✓
		V: 50	V: 400	1280×1600	✓	✓

Compatibility Timing table at Blending Project (1080P@24)

1080P@24Hz	Layout	Overlap (%)	Overlap (pixel)	Total Resolution	HDMI	DVI
	1H 2V	H: 10	H: 192	3648×1080	✓	✓
		H: 20	H: 384	3456×1080	✓	✓
		H: 30	H: 576	3264×1080	✓	✓
		H: 40	H: 768	3072×1080	✓	✓
		H: 50	H: 960	2880×1080	✓	✓
	2H 1V	V: 25	V: 268	1920×1892	✓	✓
		V: 35	V: 376	1920×1784	✓	✓
		V: 45	V: 484	1920×1676	✓	✓
		V: 50	V: 540	1920×1620	✓	✓

- ※ If there is request for image blending with more projectors (monitors) than above numbers , suggesting to work with other professional cropping video Boxes or powerful PC with multi-image-outputs graphic card that can send multi-native resolutions to multi-projector and GB102 can operate all features under "Multi-Function" Project at this case .
- ※ If customer need professional technical support ,please call Optoma



For operating correct on Blending feature, the recommend OS in PC will be *windows 7 and Windows XP*

Appendices

Troubleshooting

Case A: There are black and white stripes

That means the input resolution is smaller than output resolution at **【Generic】** Settings

Please make sure the input resolution is as same as the resolution in AP at **【Generic】** Settings / **【Resolution】**

Case B: A part of image area is missing

That means the input resolution is higher than output resolution at **【Generic】** Settings

Please make sure the input resolution is as same as the resolution in AP at **【Generic】** Settings / **【Resolution】** and the frequency must be as same as the timing table can support

Case C: The searching IP already is fail

Please make sure the internet is connect well and all devices have correct and difference IP under same IP group
(192.168.0.xxx); xxx can be 10 ~ 250

Case D: The image already show “Orange” screen

That means GB-200 can't recognize this timing and this timing isn't in Compatibility Timing table at Blending Project

Case E: It will take 100 second to source input signal if you press “Synchronize” before input signal connect to GB-200.

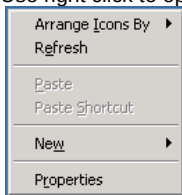
Please make sure the HDMI/DVI Splitter that **must** supports to read Box's EDID from PC
And

Make sure OS is Window 7 that allow PC to creating customized timing

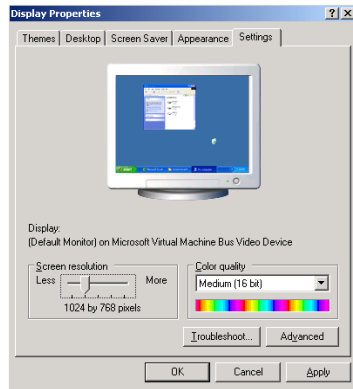
If the OS is Window XP, please following steps before using Blending Project

- (i) Setup PC's resolution become 1024 x 768 at Display Properties before open New Blending Project

- Use right click to open following page and click Properties



- Changing Screen resolution become 1024 x 768

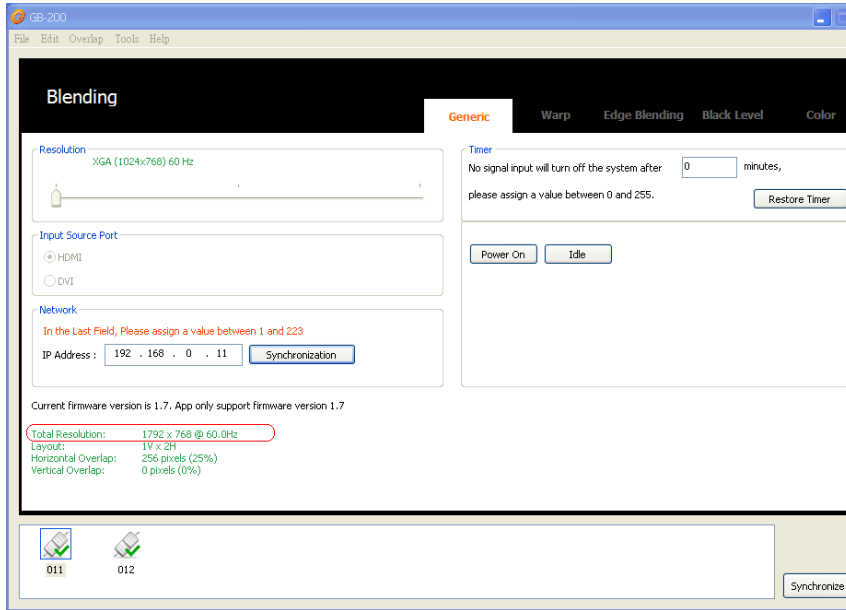


Appendices

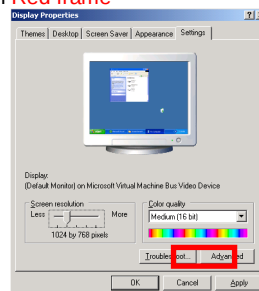
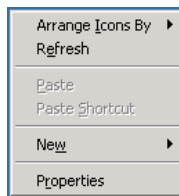
After open New Blending Project at **Step 6**

Please check the total resolution and select this timing under Display Properties settings

- Remember the total resolution at position **Red frame**



- Use right click to open following page and click Properties then Click Advanced at position **Red frame**



- Click Adapter Page and Click List All Modes to select this timing on table at position **Red frame**

